

col. 5, line 7). Within the Thornton system, voice-over-IP (“VoIP”) data packets are assigned priorities that govern the latency the prioritized packets will experience as they are routed through the network. As the Examiner rightfully noted, Thornton allows for differing priority levels to be assigned to VoIP data packets (see col. 30 , lines 7-32), the assignment of these priority levels is described as being done in a manner which will “substantially reduce any latency which these [VoIP] packets might otherwise experience through the gateway” (col. 30, lines 19-21). The reduction of latency for VoIP data is critical to the Thornton invention – It is one of the prime parameters that would determine if and when a “call” should be switched from a data network to a PSTN by the gatekeeper (col. 4, lines 65-67; col. 10, line 59 - col. 11, line 4). The Thornton invention is directed at assuring a high quality real-time voice connection.

Contrastingly, the Applicants invention is not a gatekeeper which switches between two systems so as guarantee low latency service advantageous for peer-to-peer voice communications. Rather, the Applicant’s invention is directed toward intentionally marking certain voice packets as lower priority so that their latency increases to the point beyond what would be practical for real-time human conversation. The recipient of these packets is specified as a non-human voice interface in claim 1. Thornton teaches no such method, nor does Thornton specify a non-human interface as defined by the Applicants. The Applicants submit that the primary reasoning for the Thornton invention fails to apply in a non-human interface environment.

The Examiner’s rejections of claims 5, 7 and 11, all of which are dependant upon claim 1, are also believed to be traversed for the reasons stated above. Thornton does not anticipate claim 1, and therefore it does not anticipate the dependent claims.

The Examiner also rejected claim 12 of the instant application as anticipated by Thornton, but again, the Applicants believe that Thornton teaches away from the invention described in this claim. As with claim 1, claim 12 deals with intentionally lowering the priority of a packetized voice call thereby increasing their latency to the point beyond what would be practical for real-time human conversation. The recipient of these packets is again specified as a non-human voice interface. Thornton fails to teach any such method, and fails to specify a non-human interface recipient. For these reasons, the Applicants believe that claim 12 and claim 15 (which is dependent upon 12) are allowable over Thornton.

The Examiner also rejected independent claims 17 and 23 as being anticipated by Thornton. Both of these claims recite the same limitations with respect to intentionally lowering

the priority of a packetized voice call, and the reception of the lowered priority packets by a non-human interface as were found in claims 1 and 12. For the same reasons set forth above, the Applicants believe that the Thornton reference fails to provide any information that would anticipate these claims. Thornton teaches away from the Applicants' invention.

C. Rejections based upon Voit

The Examiner rejected claims 1-7, 11-20 and 22-24 as being anticipated by U.S. Patent No. 6,295,292 ("Voit") under 35 U.S.C. § 102(e). While Voit does refer to a system which utilizes "packetized voice segments" (col. 8, lines 32-61, as referenced by the Examiner), Voit does not disclose or suggest the type of method or system claimed by the Applicants.

The Voit reference is directed toward a resource allocation and billing system adapted to handle voice calls that travel on the "Internet" and a PSTN (col. 1, lines 38-52). The disclosed embodiments of the Voit invention deal with a system where a call terminates at one end on a standard telephone connected to a Plain Old Telephone System (POTS), and on a PC at the other end. There is no non-human interface as defined by the Applicants, and certainly no mention of prioritizing a packet in anticipation of its reception by a non-human interface. The PC receiver of Voit is still relaying a real-time voice call to a human recipient (col. 4, lines 19-51; FIG. 1B). The Examiner cited col. 26, lines 42-59 in Voit in support of the claim that Voit discloses a system wherein certain voice packets are intentionally marked as lower priority so that their latency increases to the point beyond what would be practical for real-time human conversation (as is the case in the Applicants' invention). Voit, and in particular the excerpt cited by the Examiner, actually teach away from the Applicants' invention. Voit states that priority levels are employed to enable the delivery of "audio, video, and other real-time data that have guaranteed bandwidth and latency requirements", thereby "ensuring that voice or video transmission is interrupted by lower priority packets." As previously discussed, the Applicant's invention is directed toward intentionally marking certain voice packets as lower priority so that their latency increases to the point beyond what would be practical for real-time human conversation. Voit simply does not anticipate claim 1, nor any of the claims dependent upon claim 1 which were rejected (claims 2, 3, 4, 5, 6, 7, and 11).

The Examiner also rejected claim 12 of the instant application as anticipated by Voit. However, Claim 12 deals with intentionally lowering the priority of a packetized voice call thereby increasing their latency to the point beyond what would be practical for real-time human

conversation (similar to claim 1). The recipient of these packets is again specified as a non-human voice interface. Voit simply fails to teach any such method. Consequently, the Applicants believe that claim 12, and claims 13, 14, 15, and 16 (all of which are dependent upon 12) are allowable over Voit.

The Examiner also rejected independent claims 17 and 23 as being anticipated by Voit. Both of these claims recite the same limitations with respect to intentionally lowering the priority of a packetized voice call, and the reception of the lowered priority packets by a non-human interface as were found in claims 1 and 12. For the same reasons set forth above, the Applicants believe that the Thornton reference fails to provide any information that would anticipate these claims, or claims 18, 19, 20, and 22 (dependent upon claim 17), or claim 24 (dependent upon claim 23). Voit teaches away from the Applicants' invention.

D. Rejections based upon Kung

The Examiner also rejected claims 1, 2, 4-7, and 9 as obvious in light of U.S. Patent No. 6,775,267 ("Kung") under 35 U.S.C. § 103(a). The Kung reference discloses a billing method for IP subscribers. Kung provides the subscribers with a means to vary the bit rate of their network service according to the requirements of the particular communication being sent, and to be billed at a rate commensurate with the chosen level of service (col. 2, lines 31-52). As the Examiner noted, there is no mention of varying network service bit rates to adapt for communicating to a non-human interface. Beyond that there is even a more striking difference between Kung and the Applicants' invention. Kung is a subscriber driven system – The subscribers to the network proactively choose the level of service (bit rate) they want to utilize and pay for (col. 2, lines 25-29; col. 3, lines 60-67; col. 9, lines 53-59). The Applicants invention is directed to a system and method where the service level (latency) is automatically regulated independent of the individual subscriber. The Kung control architecture is incapable of dealing with the type of network resource management and allocation that the Applicants' invention is directed toward. Far from suggesting the Applicants' invention, Kung, like the other cited references, teaches away from it. The Applicants' invention assigns a lower priority to VoIP communications destined to be received by a non-human interface. This is done in an automatic, user-independent fashion so as to maximize the efficient use of the overall network bandwidth (see Application page 2, line 20 – page 3, line 2). The Kung subscriber-driven pay-for-service method could simply never be used to manage such a network resource. The method

of Kung is wholly inapplicable to the task of exploiting the advantage of assigning non-human interface destined packets a lower priority, and thereby freeing up bandwidth to allow human interface destined packets to be transmitted at higher priorities without latency problems. There is nothing suggested by Kung which makes the Applicants invention obvious.

E. Allowable subject matter

The Examiner objected to claims 8, 10 and 21 as being dependent upon rejected claims. However the Examiner noted that these claims would be allowable if rewritten in independent form. In light of the above arguments, the Applicants believe they have successfully traversed the Examiner's initial rejection of the independent claims at issue. Consequently, the basis for the objection to claims 8, 10 and 21 have been removed. Applicants request that the Examiner reconsider the objections raised with respect to these claims.

CONCLUSION

Applicants respectfully request that the Examiner consider the analysis of the references offered above. It is believed that in light of the information provided by the Applicants, the pending claims (1-24) are in condition for allowance, and, accordingly, the Examiner is requested to pass this application to issue.

Dated: November 23, 2004

Respectfully submitted

By 

Robert P. Marley

Registration No.: 32,914

Tel.: (215) 323-1907

Attorney for Applicants